

## ABSTRACT

A method that adjusts an optical apparatus that guides a radiation from a first surface to a second surface includes a number of steps, for example. A first step measures an aberration of the optical apparatus having a plurality of optical elements and at least one correction element. A second step calculates, based on a measurement result of the first step, a surface shape that the correction element should have, the aberration of the optical apparatus being a predetermined value when the correction element has the surface shape that the correction element should have. A third step removes the correction element from the optical apparatus and machines the correction element so that the surface shape of the correction element coincides with the surface shape calculated in the second step. A fourth step returns the correction element machined in the third step into the optical apparatus.